



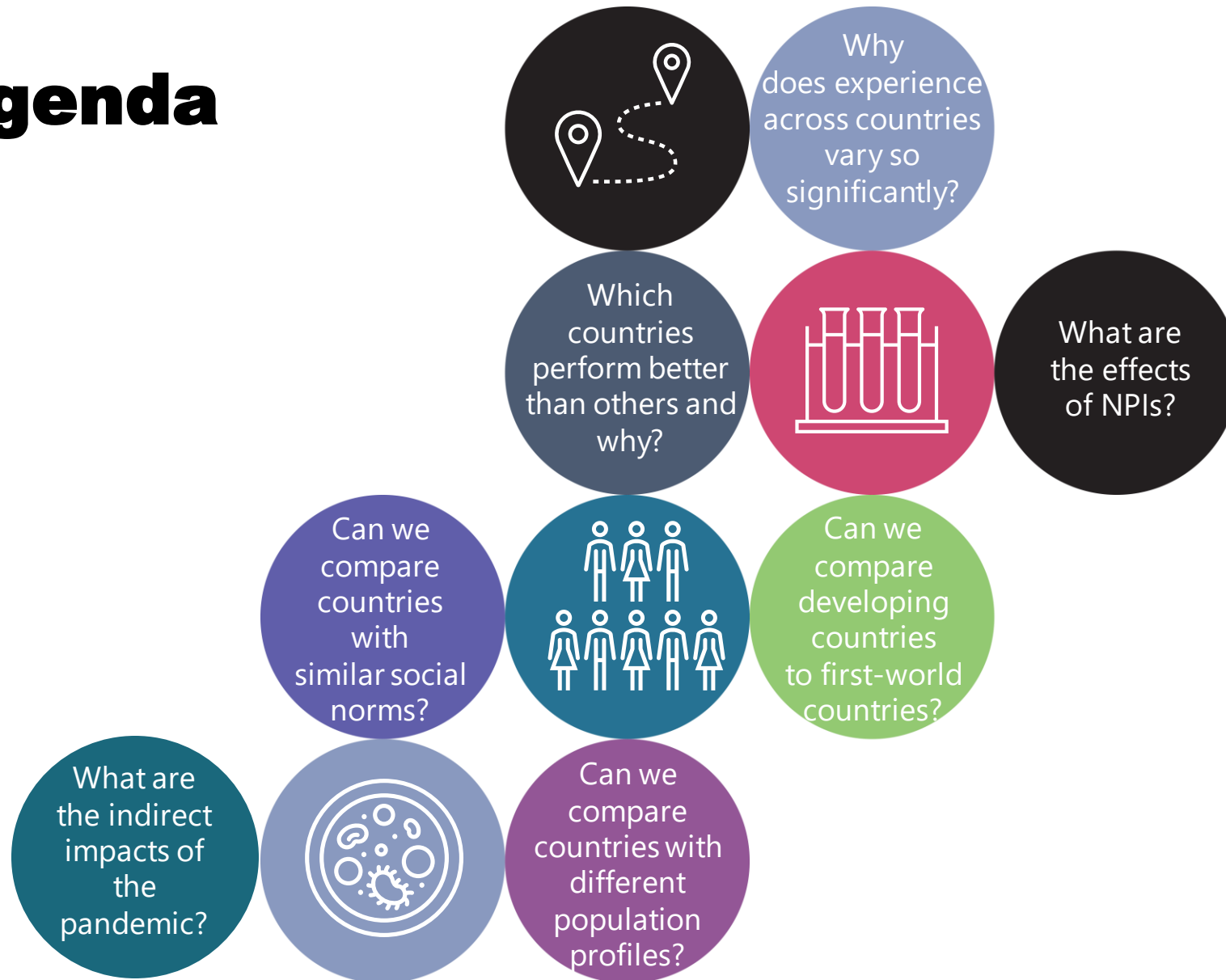
Global COVID-19 analysis and trends



**Christoff
Raath &
Phumla
Tsematse**

foresight

Agenda

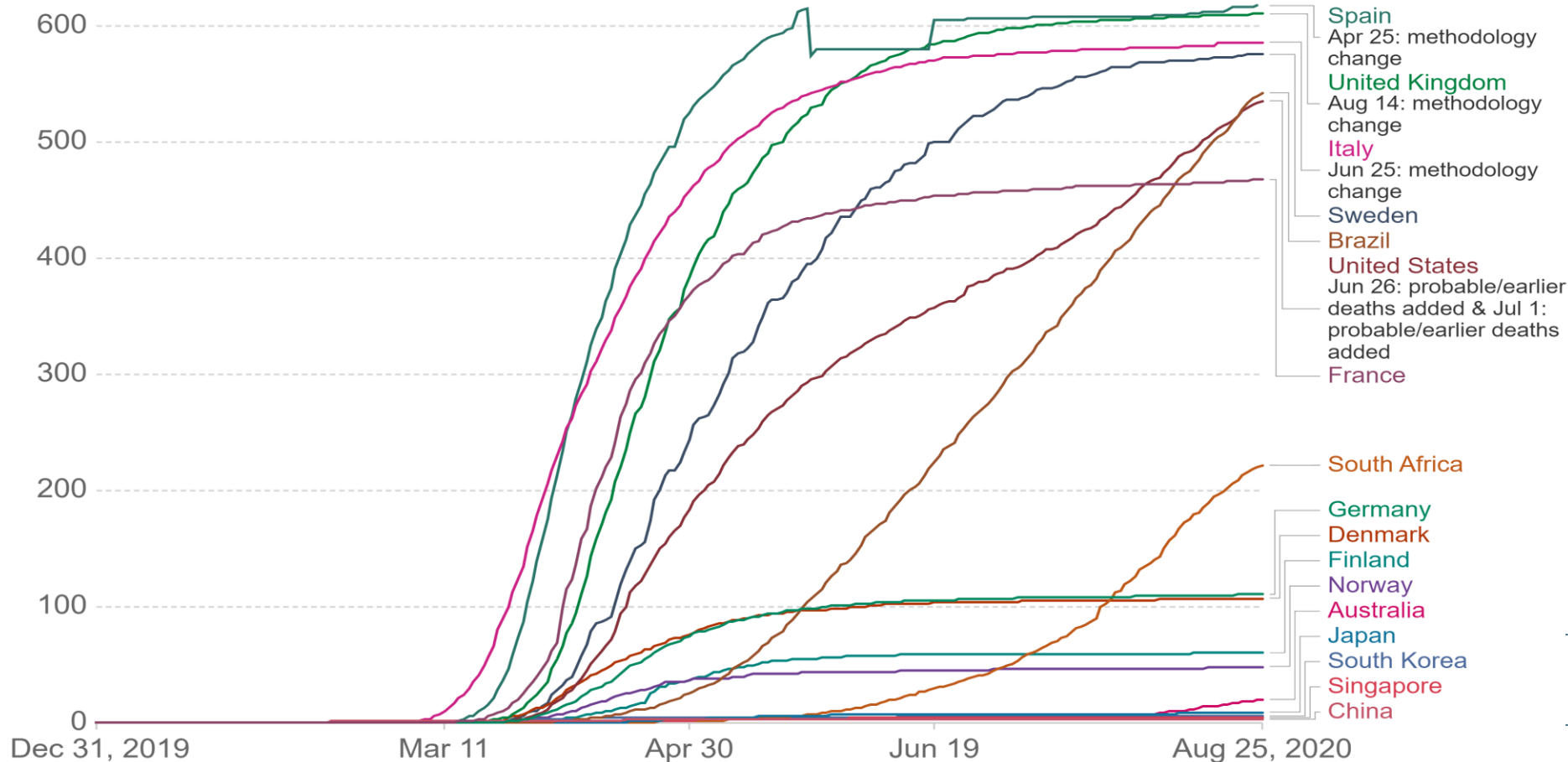


Similar performances in neighbouring regions

Cumulative confirmed COVID-19 deaths per million people

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

Our World
in Data



EU:
Spain, UK, Italy
have highest
deaths per
million

North & South
America:
USA & Brazil
have similar
deaths per
million

Nordic countries
Similar
experience
except for
Sweden

Asian countries
Lowest deaths
per million

Source: European CDC – Situation Update Worldwide – Last updated 25 August, 10:34 (London time)

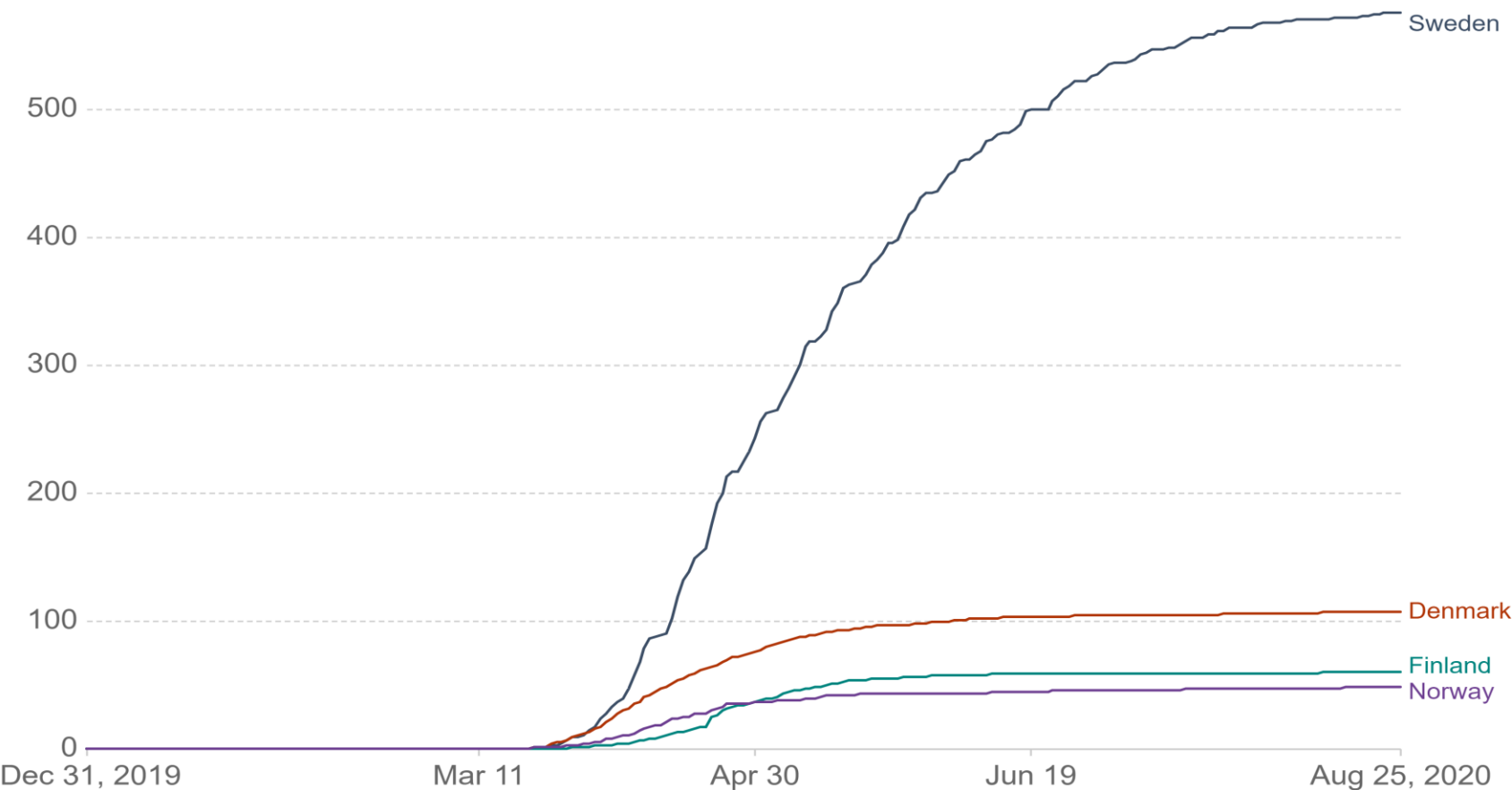
CC BY

Nordic countries have similar experience except for Sweden

Cumulative confirmed COVID-19 deaths per million people

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

Our World
in Data



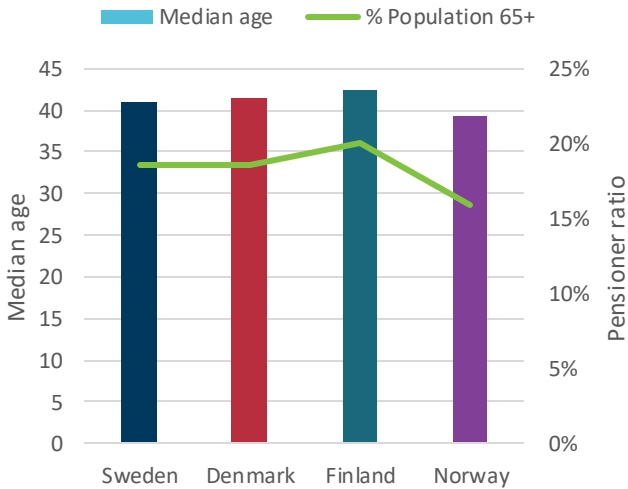
Source: European CDC – Situation Update Worldwide – Last updated 25 August, 10:34 (London time)

CC BY

Why does Sweden have more deaths?

Is this due to less restrictions or are there are other reasons?

Finland is the oldest on average suggesting they should have the toughest challenge

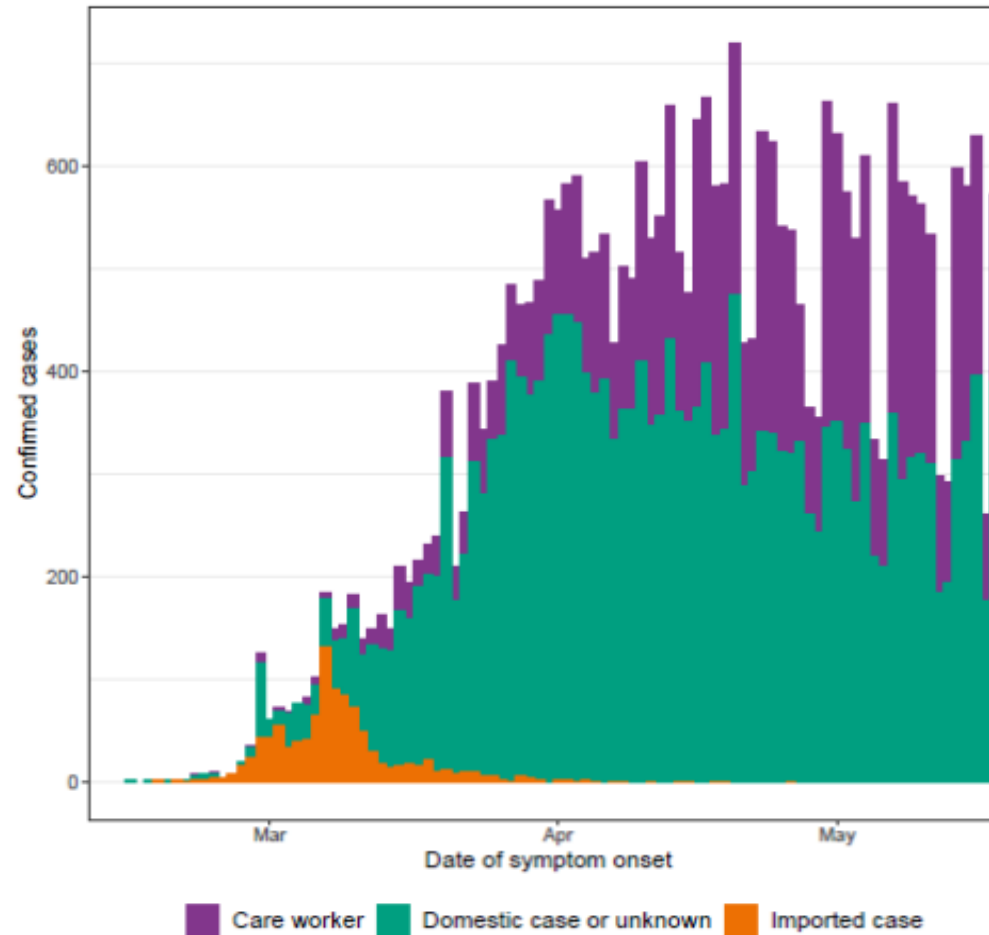


Sweden's epidemic trajectory

Initially cases spread after being imported by international travel

Virus in Sweden was already widespread on March 12

The strict lockdown measures of other Nordic countries came between Mar 12 and Mar 16



Nordic countries with stricter lockdowns show lower mortality, but there is some nuance

Denmark

Early March:

- Self-isolation for travelers
- School closures and working from home
- Public gatherings prohibited

Finland

Early March:

- Advise against all international travel
- School closures and working from home

Norway

Early March:

- Advise not to use public transport
- School closures and working from home
- Quarantine for international travelers

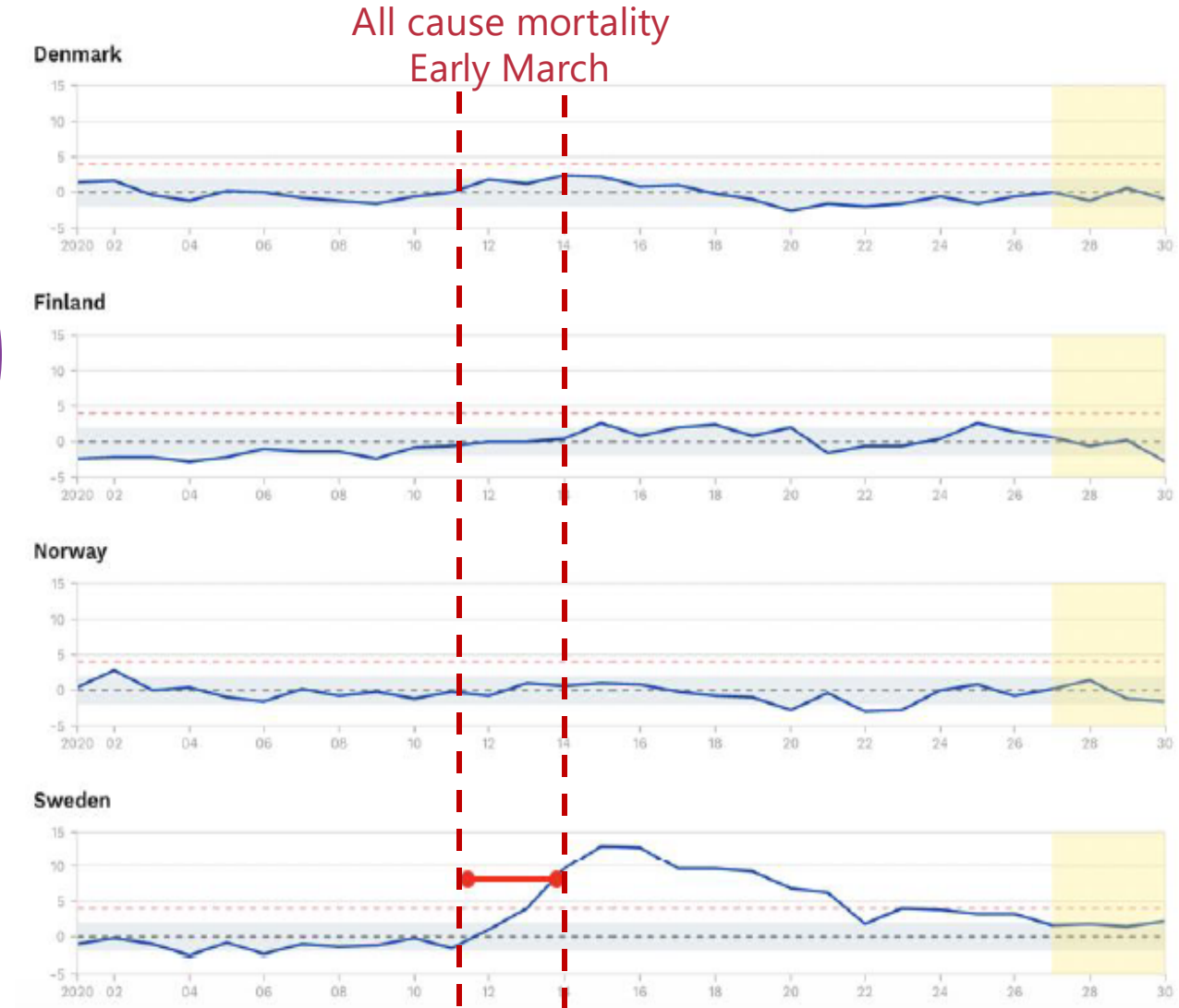
Sweden

Early March:

- Travel advice
- Public gatherings restricted

Late March:

- Stricter protocols at bars and restaurants
- Advise on school closures



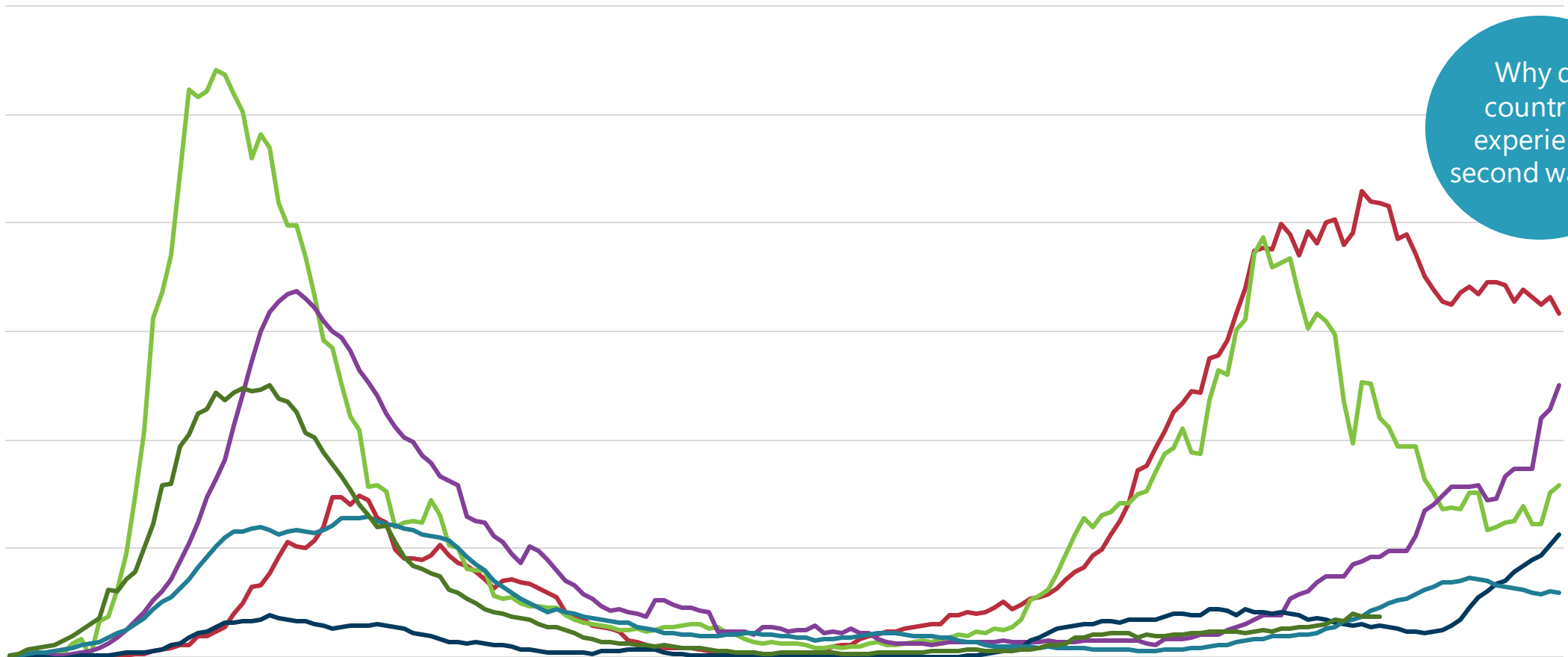
Possible reasons Sweden experience may be different



Countries experiencing a second wave

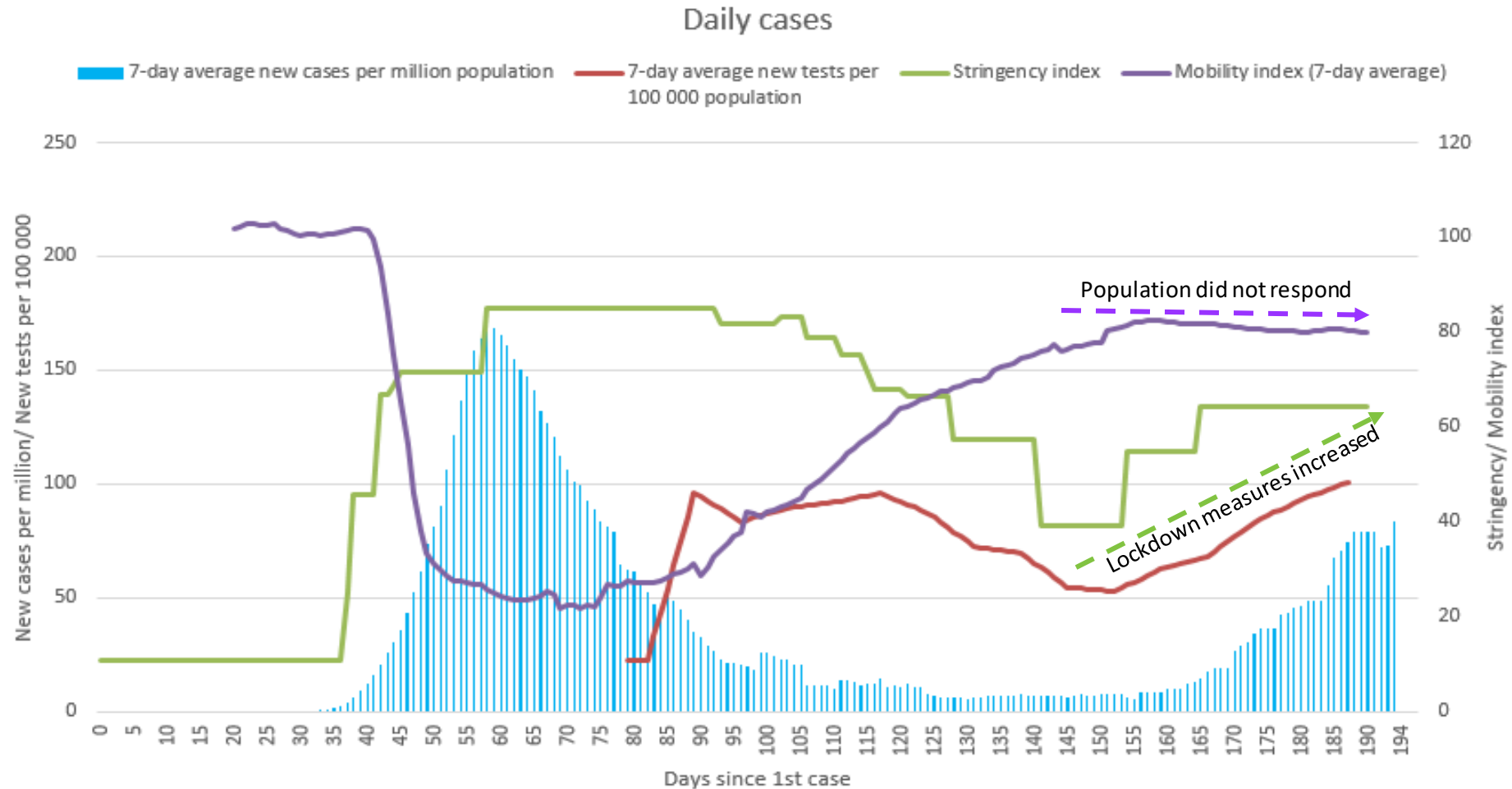
Daily new cases per million people - 7 day moving average

Israel Luxembourg Spain Croatia Netherlands Switzerland



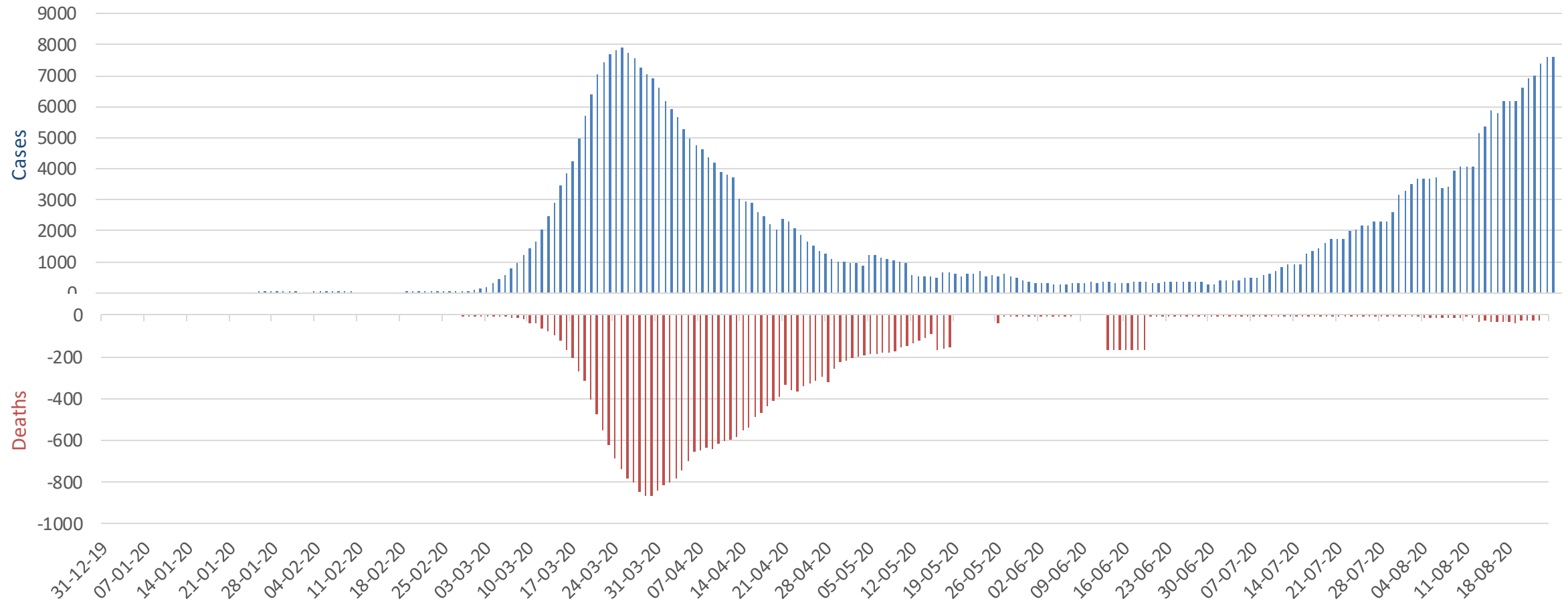
Why do countries experience second waves?

Spain's stringency and mobility index

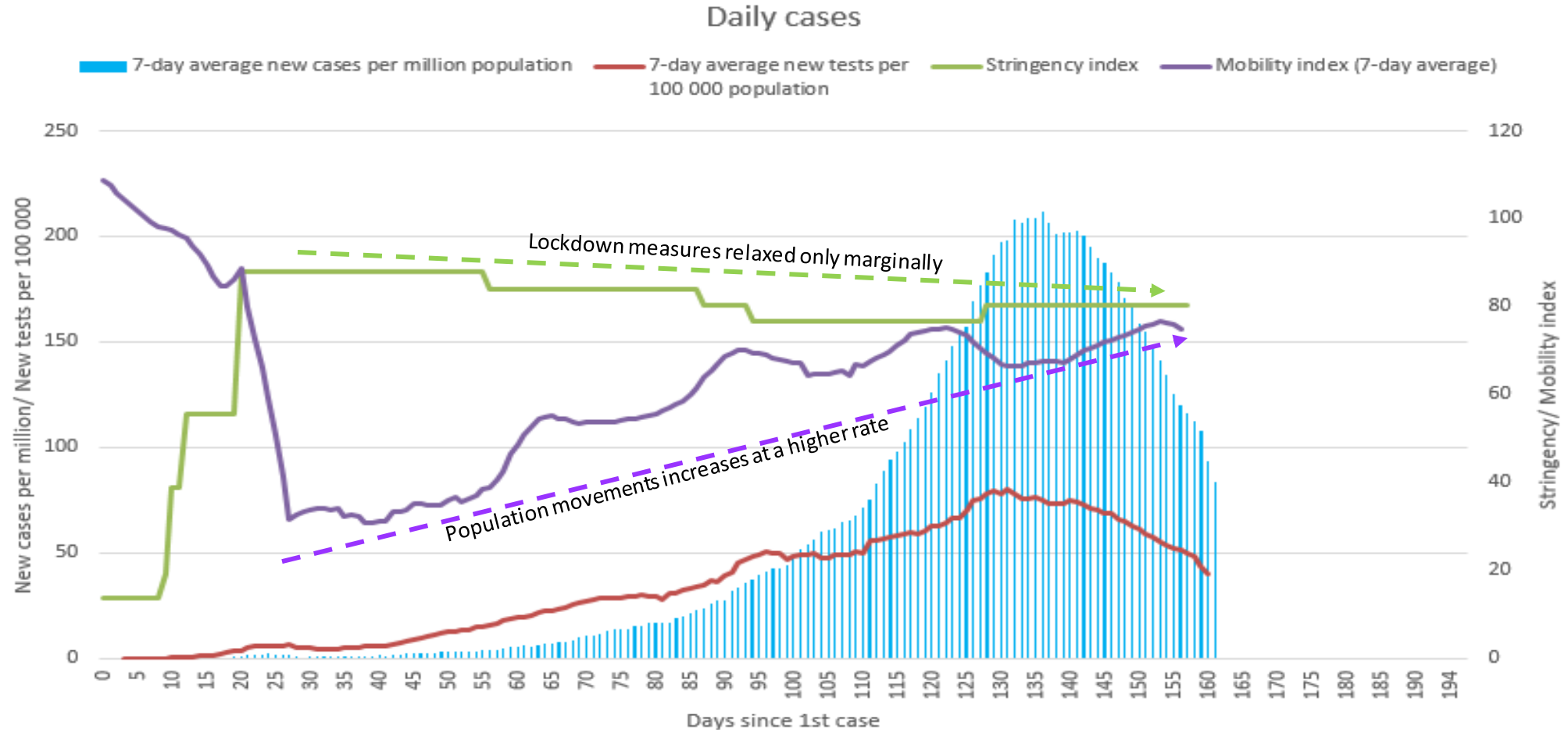


Spain's population initially complied well with lockdown measures, but later disregarded these measures. Mobility no longer responded to the strictness of the measures.

When Spain ramped up testing, surge in cases but deaths did not follow



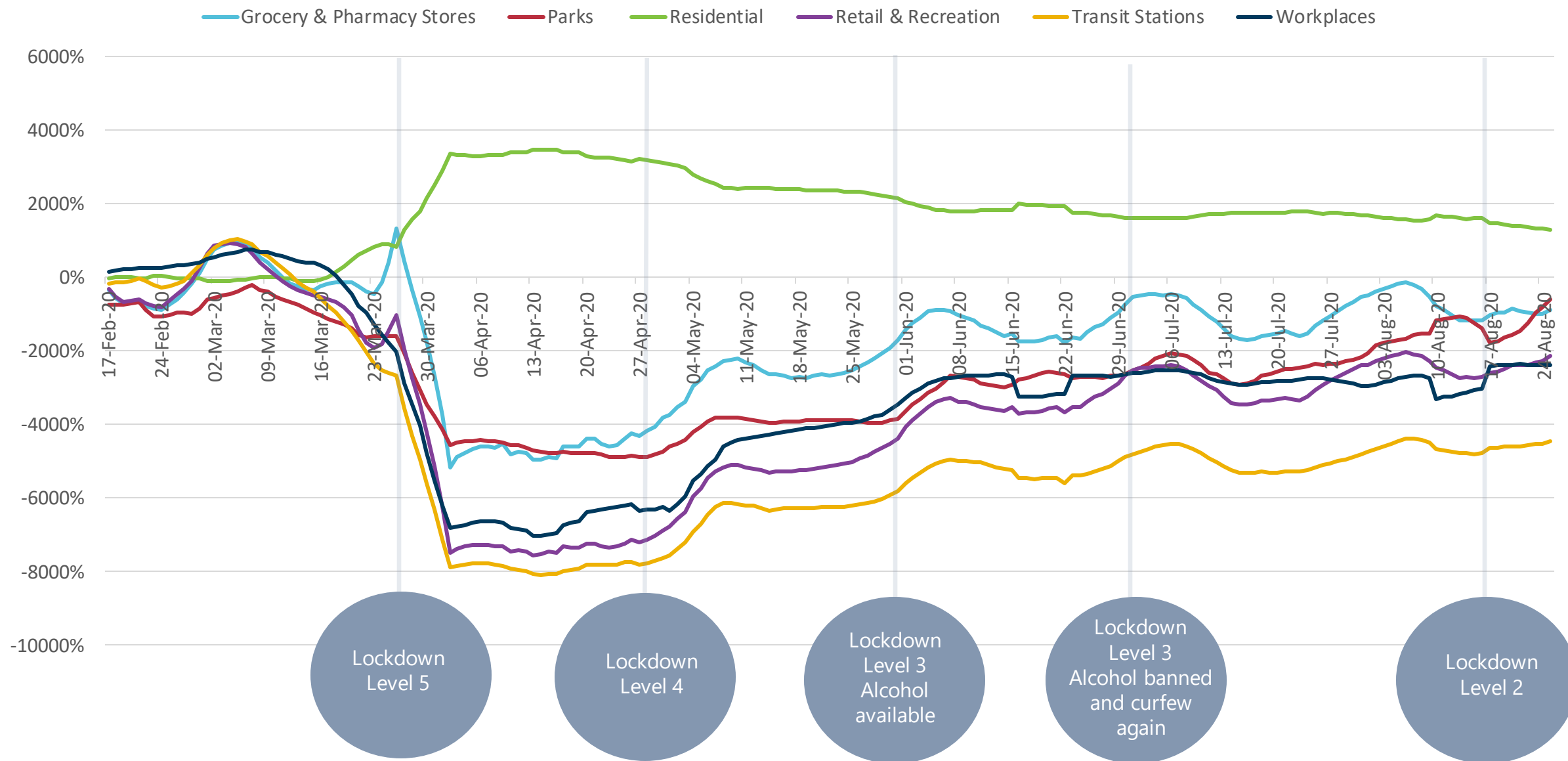
South Africa stringency and mobility index



Although SA lockdown measures lifted marginally, South Africans became less compliant over time

Mobility in South Africa

Initial sharp decline in mobility, but thereafter increases regardless of lockdown levels



Possible reasons for second waves



Asian countries who experienced SARS in 2002-2003 were more prepared in their response to COVID-19

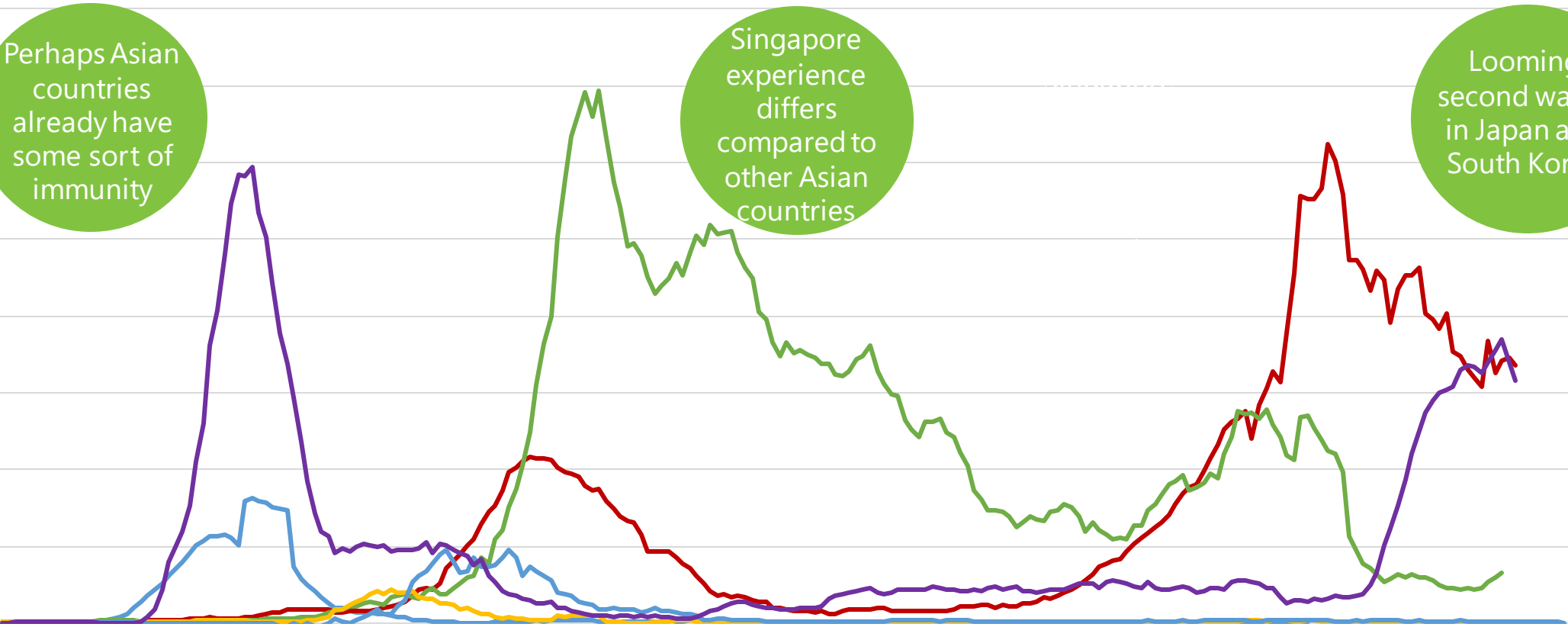
Daily new cases per million people - 7 day moving average

China Japan Singapore Taiwan Thailand Vietnam South_Korea

Perhaps Asian countries already have some sort of immunity

Singapore experience differs compared to other Asian countries

Looming second waves in Japan and South Korea



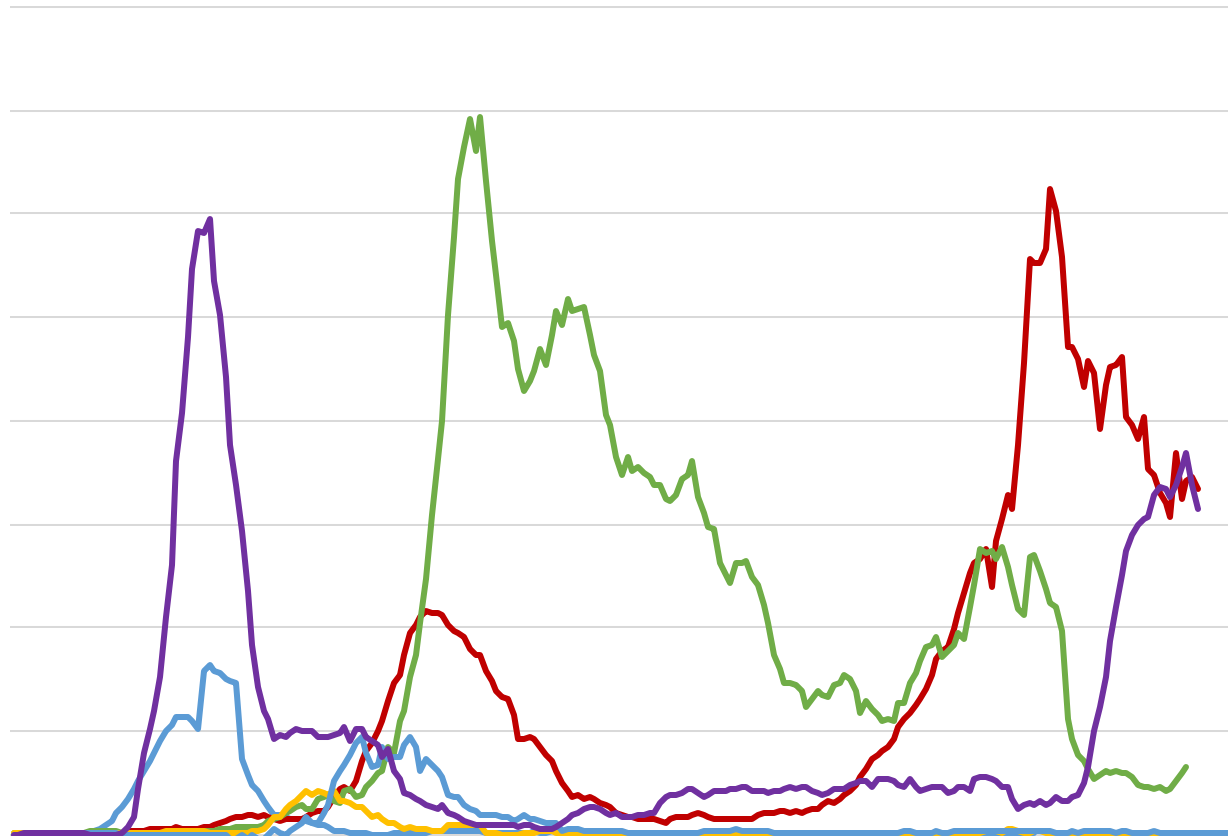
Why does Singapore experience differ to other Asian countries?



Looming second waves in countries who were more prepared

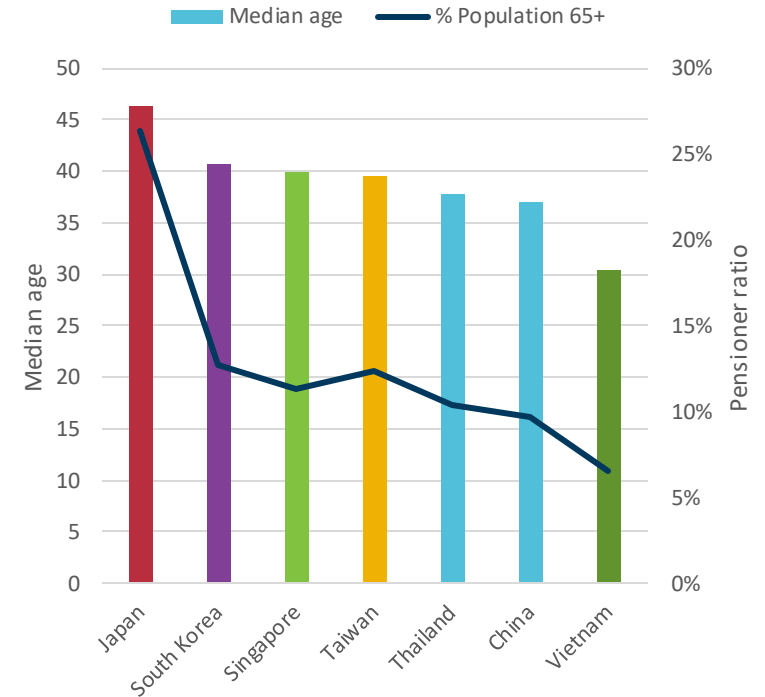
Daily new cases per million people - 7 day moving average

China Japan Singapore* Taiwan
Thailand Vietnam South_Korea



Japan and South Korea are older

A well controlled 1st wave could mean there is still a large group susceptible to infection

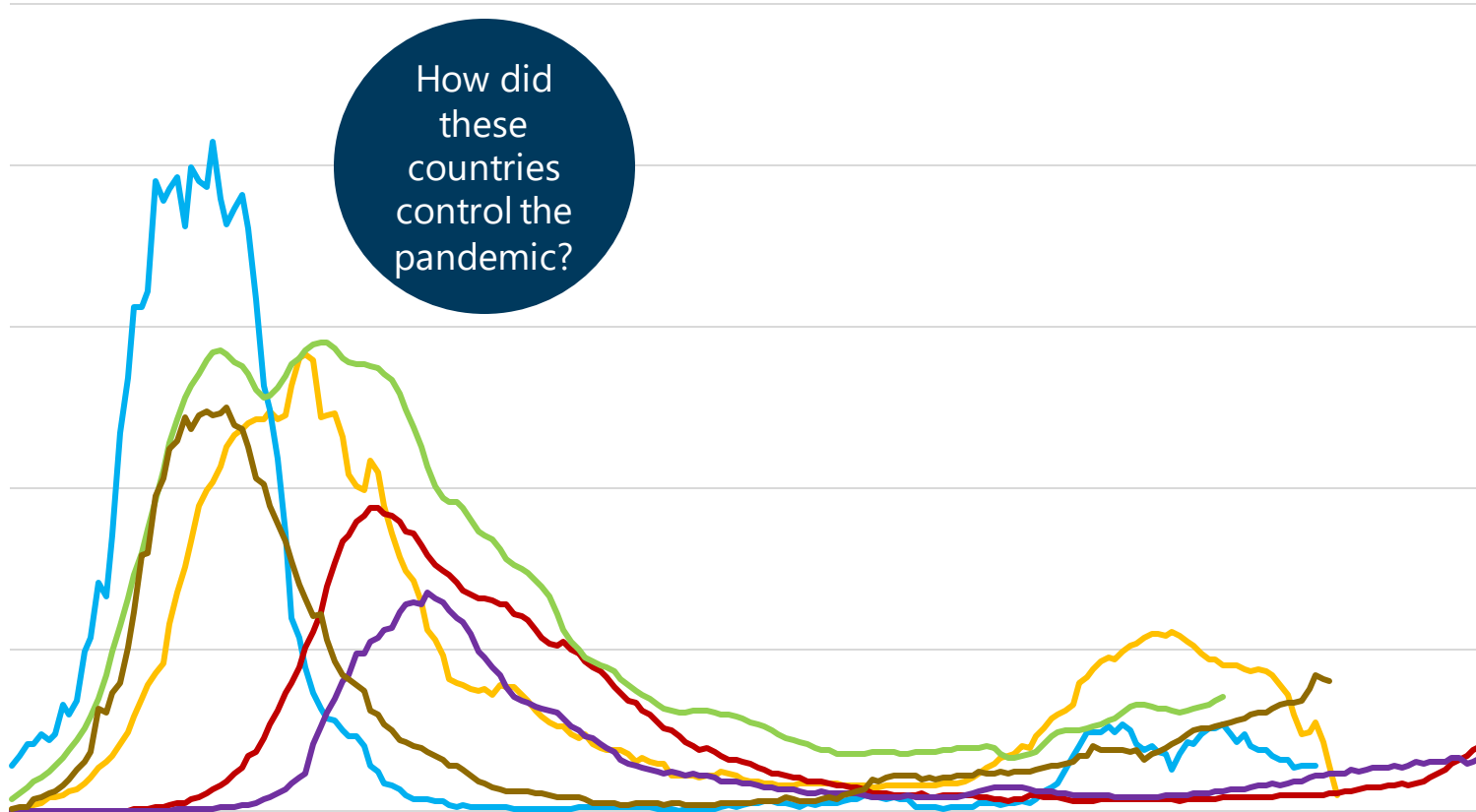


Countries that have plateaued

Daily new cases per million people - 7 day moving average

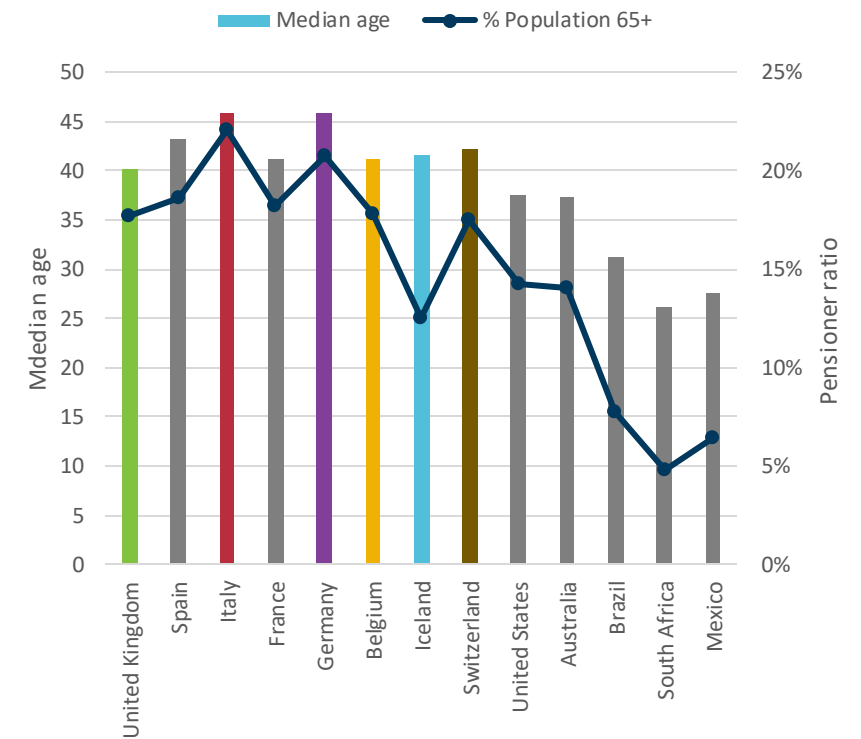
Belgium Iceland Italy United_Kingdom Germany Switzerland

How did these countries control the pandemic?



Germany is almost as old as Italy but had a far less severe experience

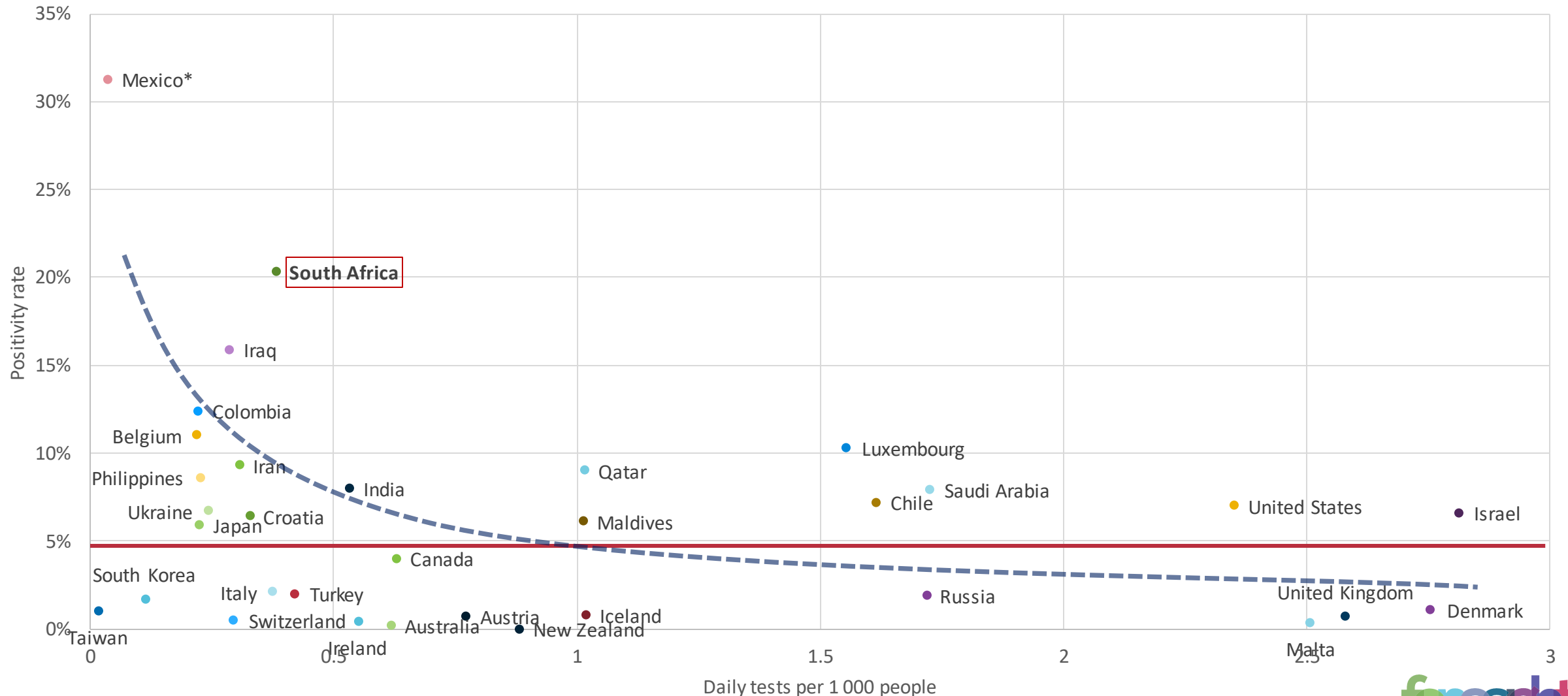
Germans may be less contact intensive compared to Italians



Possible reasons for effective infection control



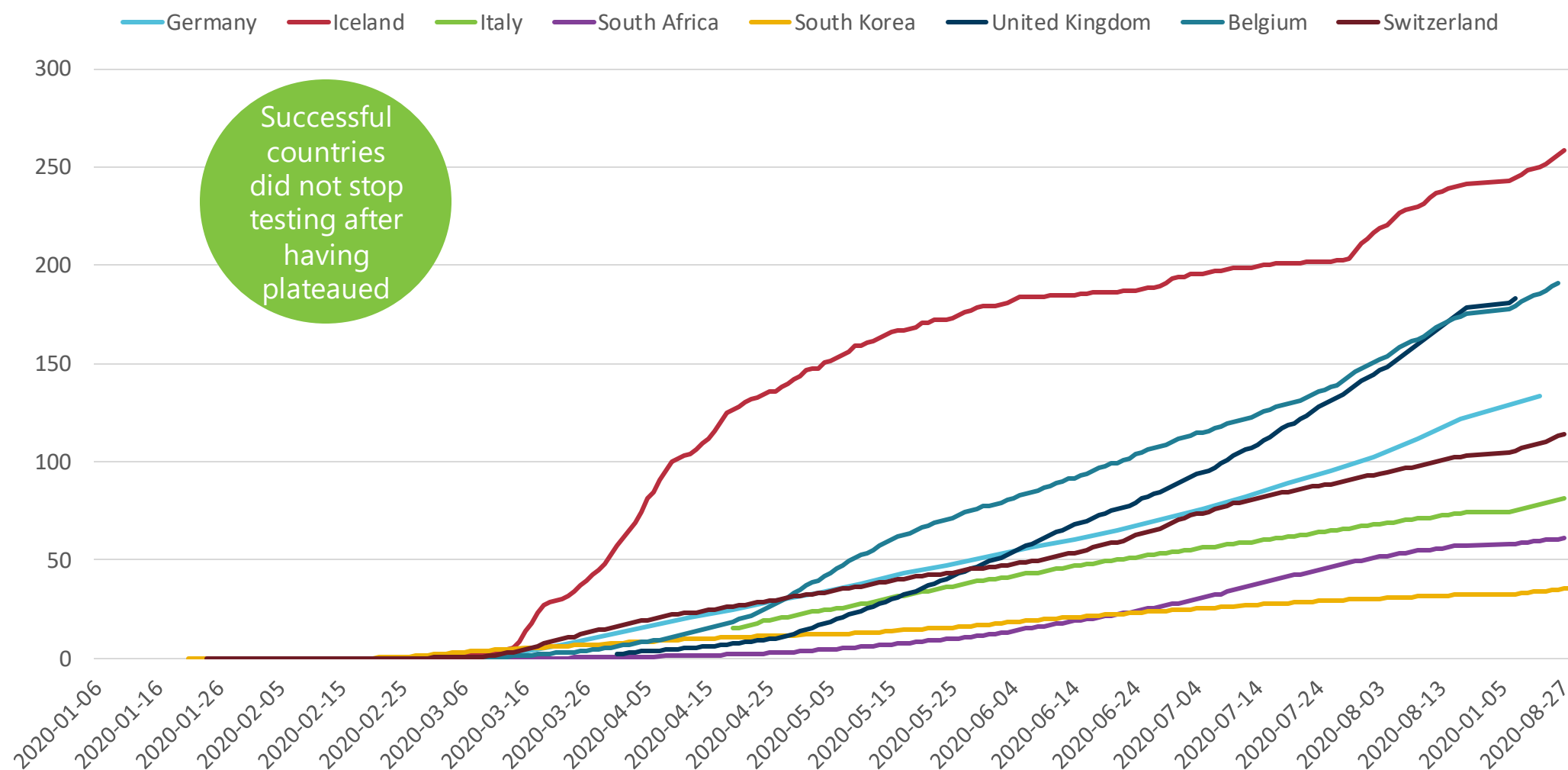
Positivity rate and tests per capita



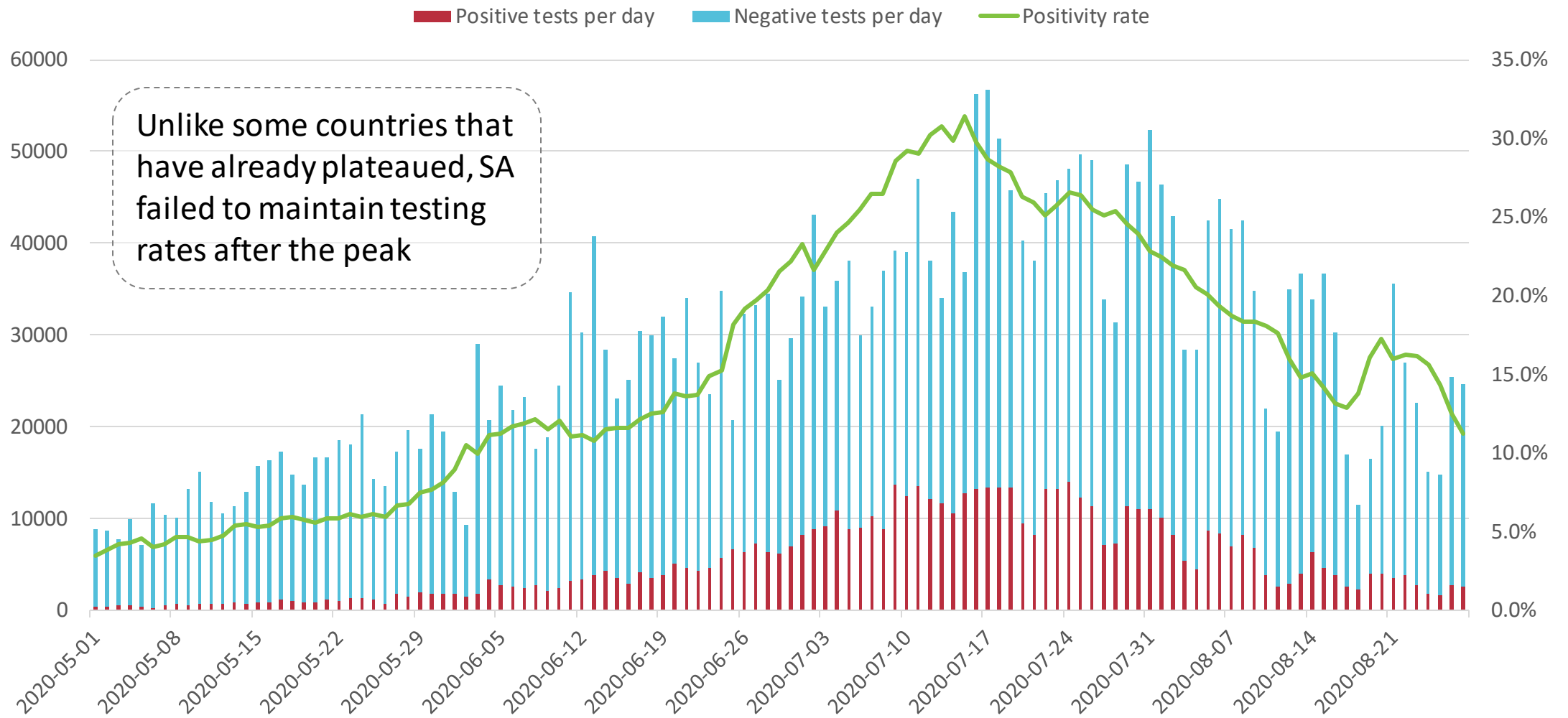
Although there are some exceptions, countries who test more generally show lower positivity rates

*Mexico adjusted downwards; true positivity rate is 62.5%

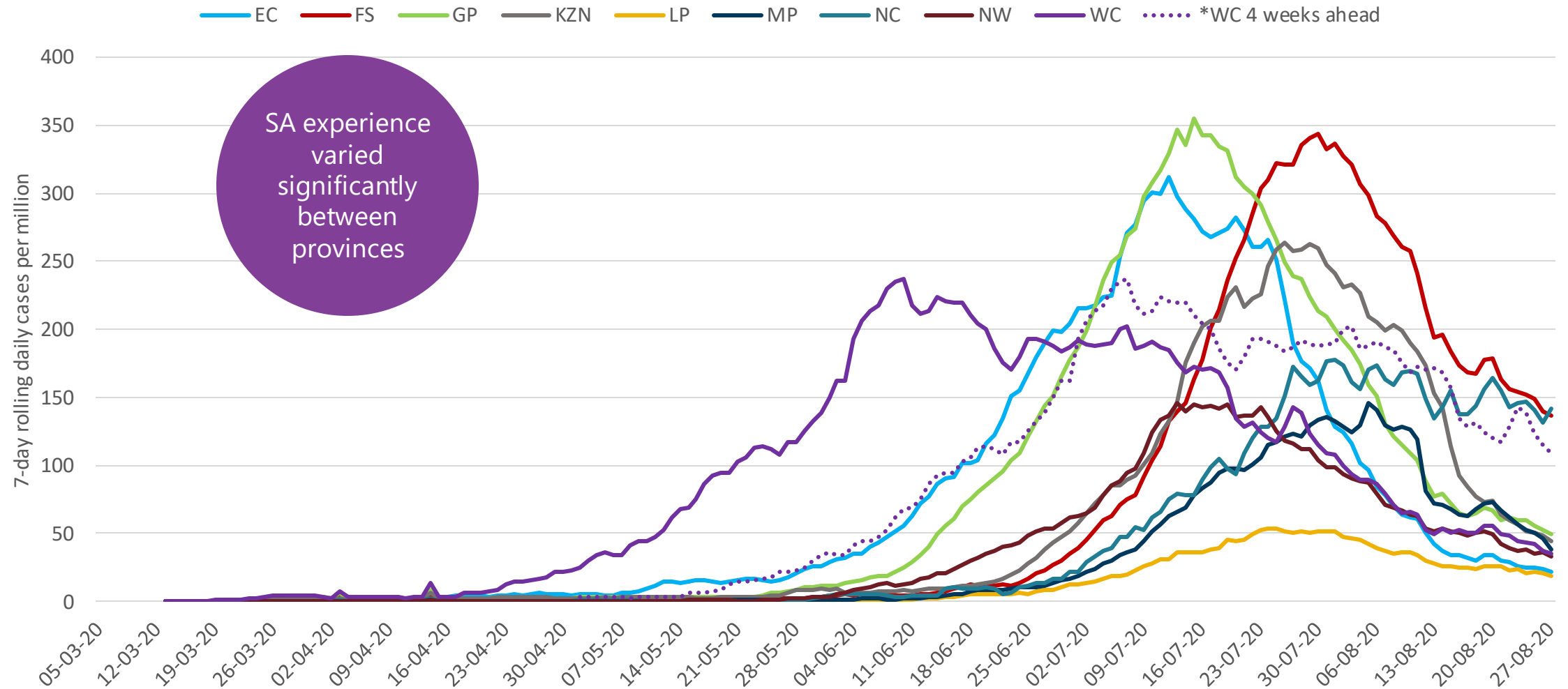
Testing rate per 1 000



Positivity rate in South Africa

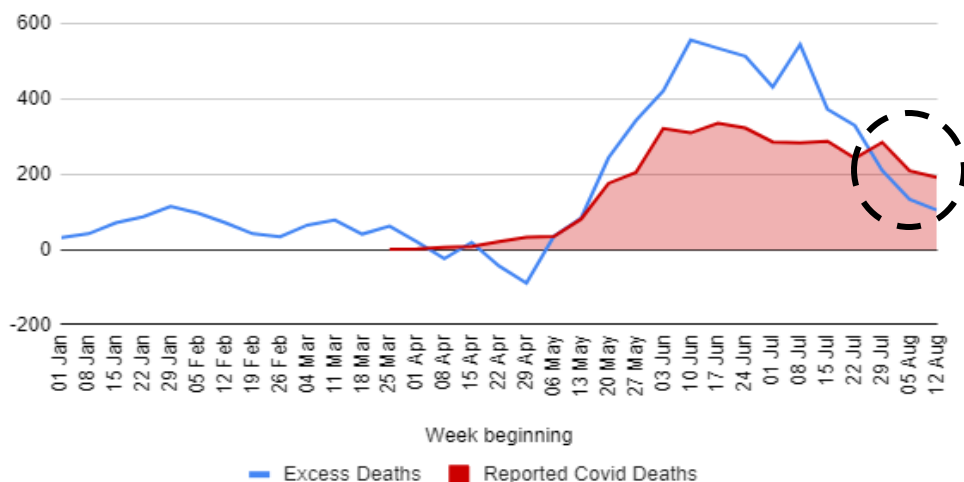


Relative peaks in provincial cases

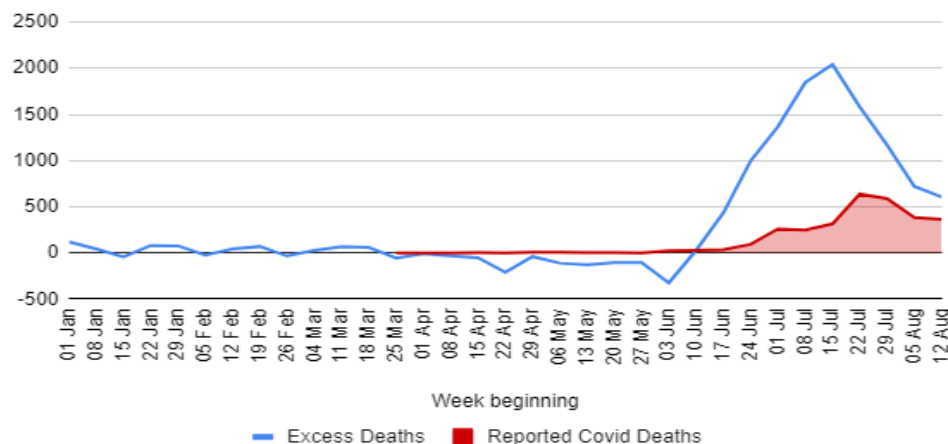


SAMRC excess deaths vs COVID-19 deaths

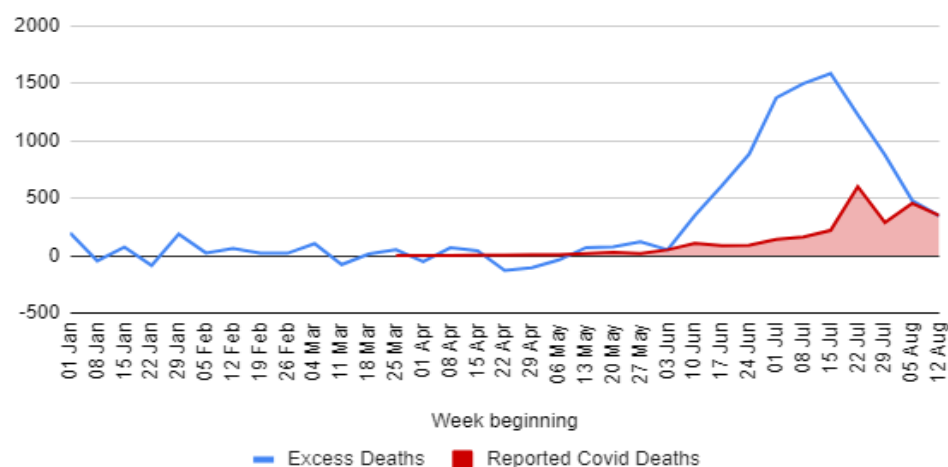
WC (Natural) Excess Deaths and Reported Covid-19 Deaths



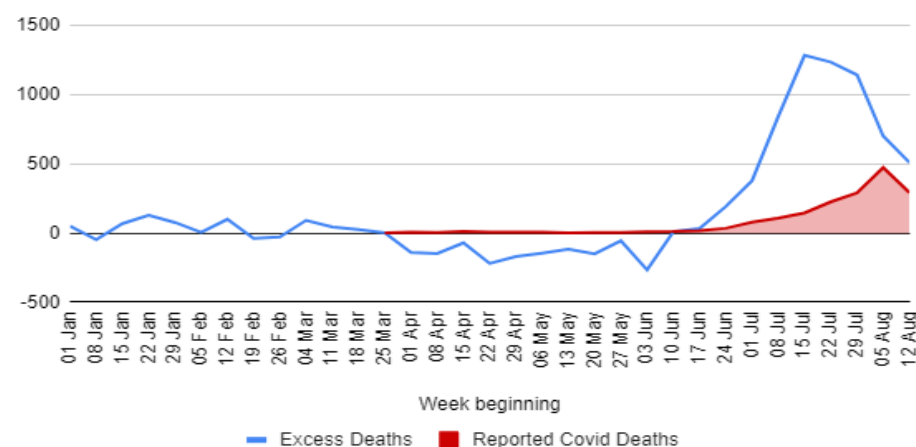
GT (Natural) Excess Deaths and Reported Covid-19 Deaths



EC (Natural) Excess Deaths and Reported Covid-19 Deaths

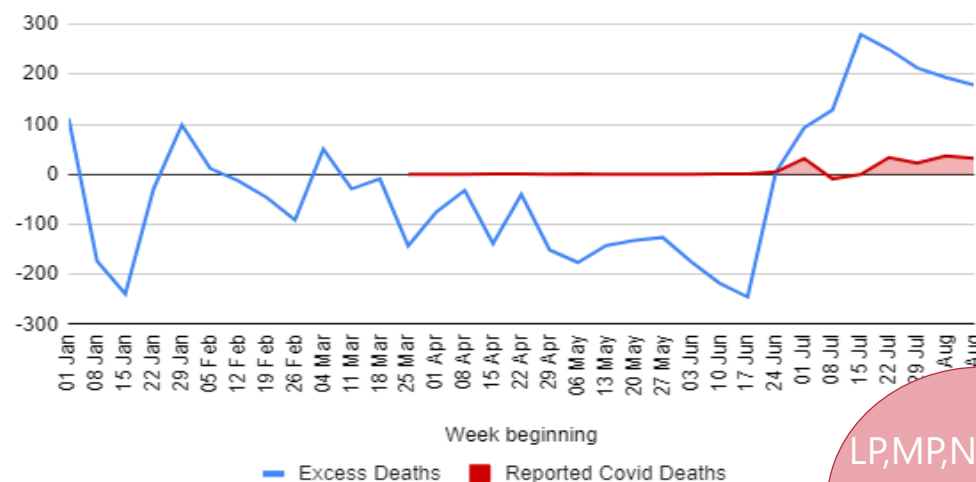


KZ (Natural) Excess Deaths and Reported Covid-19 Deaths

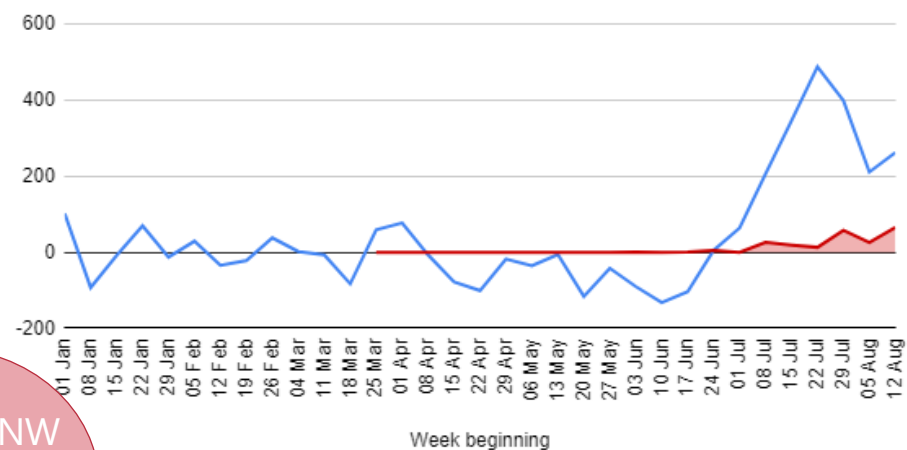


SAMRC excess deaths vs COVID-19 deaths

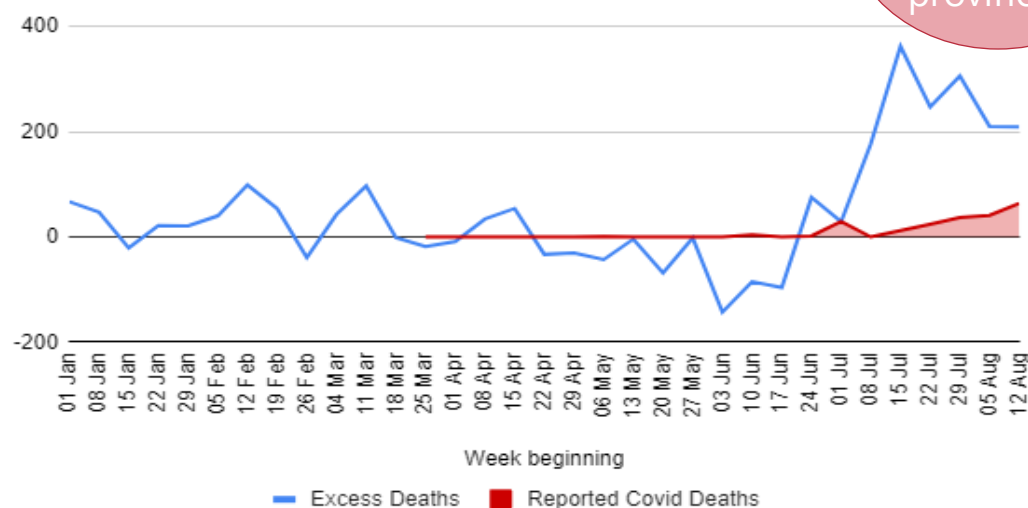
LM (Natural) Excess Deaths and Reported Covid-19 Deaths



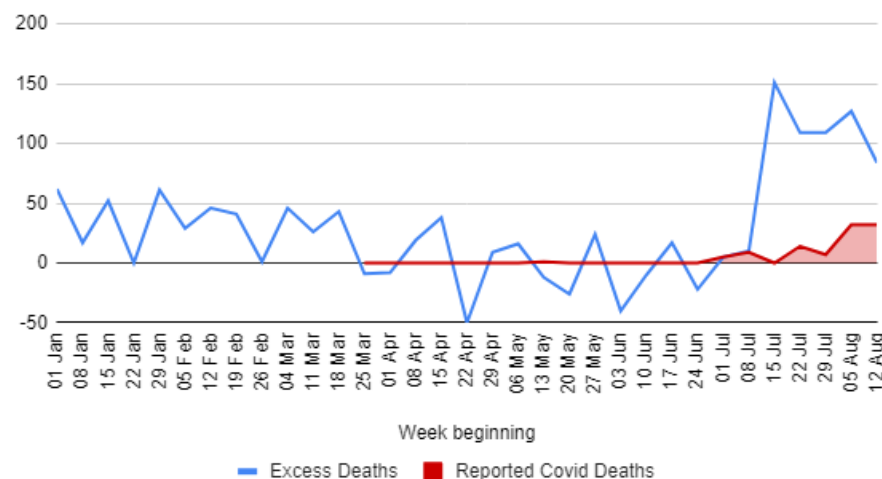
MP (Natural) Excess Deaths and Reported Covid-19 Deaths



NW (Natural) Excess Deaths and Reported Covid-19 Deaths



NC (Natural) Excess Deaths and Reported Covid-19 Deaths



LP,MP,NC&NW
show larger gap
than other
provinces

Rectangular Snip

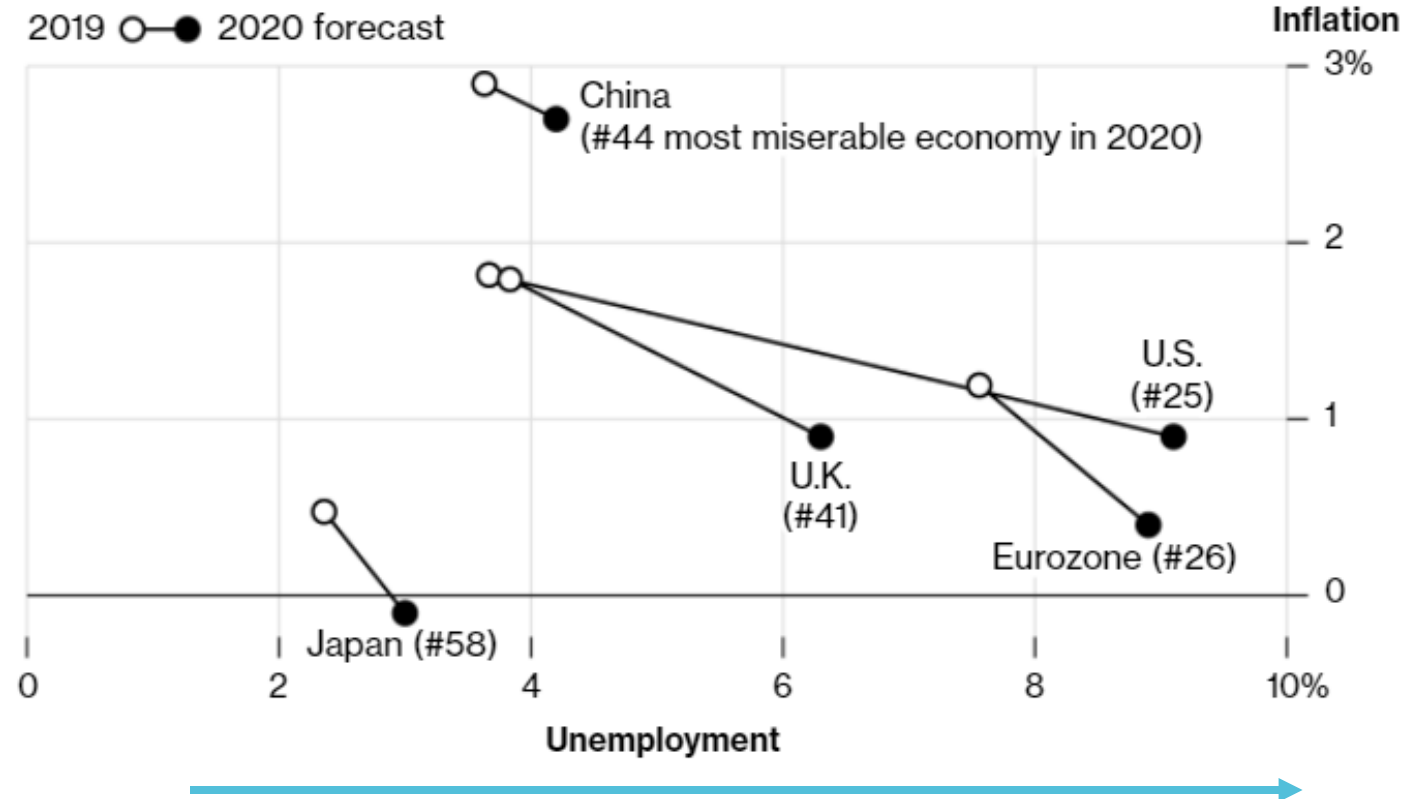
Possible factors influencing country variation.



Economic impact

A Year of Change

Falling inflation and growing unemployment are in store for the world's largest economies



Most economies are experiencing rising unemployment, some may be only be medium-term trends (consider furloughed workers during lockdowns)

Bloomberg Index

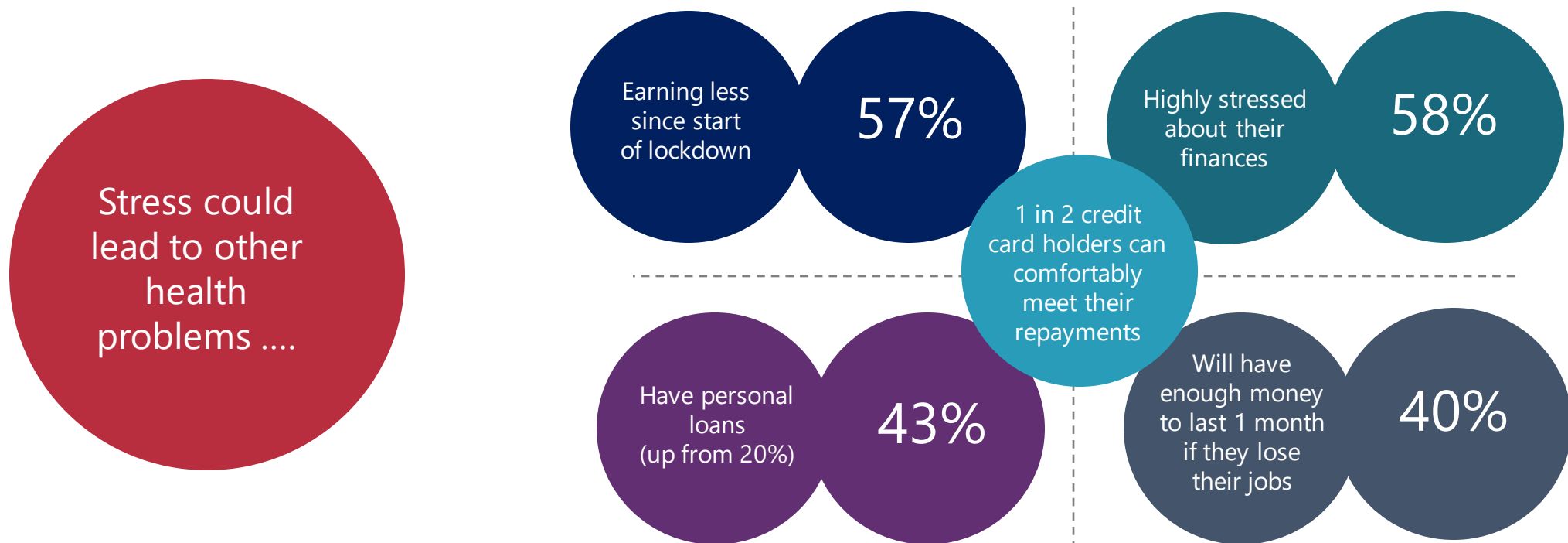
Relies on concept that low inflation and low unemployment show how good a country's residents feel.

In China, 2020 unemployment and inflation data are projected to be modestly impacted, with the world's second-biggest economy improving seven spots to No. 44

Economic impact

... could lead to knock-on health impact

Old Mutual annual survey of metro-working individuals- Savings and Investment Behaviour attitudes
Survey of 1487 respondents (fieldwork during May and June 2020)



Wuhan hosts a pool party!





Q&A